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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,580	08/09/2001	Vugranam C. Sreedhar	YOR920010262US2	2877

7590 05/28/2004

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Fairfield, CT 06430

EXAMINER

VO, TED T

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,580

Applicant(s)

SREEDHAR, VUGRANAM C.

Examiner

Ted T. Vo

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 8, 16 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 8, 16 and 20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040526.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 20040526.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the application filed on 08/09/2001. Claims 8, 16, and 20 are subjected to restriction/election requirement.

Claims 1-20 are pending in the application.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, 9-15, and 17-19 drawn to an methods, systems, and articles of manufacturing for programming a software component, classified in class 717, subclass 107.
 - II. Claims 8, 16 and 20, drawn to a method, a system, and an article of manufacturing for posting a message to a group, classified in class 717, subclass 120.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the invention I has a separate utility as claiming *programming of a software component*, and the invention II has a separate utility for claiming *posting message to a group of software components*.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Kevin Mason, Attorney of record, Reg. No. 36597 on 5/24/04, a provisional election was made **with traverse** to prosecute the invention of group I, Claims 1-7, 9-15, and 17-19. Affirmation of this election must be made by Applicants in replying to this Office action. Claims 8, 16, and 20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3, 9-11, 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 9, and 17: Claims 1, 9, and 17 comprise the limitation *preventing said properties of said software component from being inherited by another component*". This limitation is identified as being indefinite because it does not know what the functionality of "properties" in which it got "inherited" then prevented from "inheritance" is. Claims 1, 9, 17 recite the term "properties" in a broad manner, then lack further limitations for what to do in term of preventing. Therefore, it is vague to know what it is in a component, and what it makes such properties can be prevented from being inherited.

Examiner interprets "properties" as declaratives, private, public, signatures, syntactic instructions, etc., of a program.

Claims 2-3 and 10-11: Claims 2-3 and 10-11 depend on the claims that are identified as being indefinite, thus the Claims 2-3 and 10-11 are indefinite.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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6. The claims 1-7 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 1-3: Claims 1-3 are claiming a method for programming a software component which is led by Claim 1, where the claimed recitation of Claim 1 is as followed:

A method for programming a software component, said method comprising the steps of: defining properties of said software component, including at least one input port and at least one output port; and preventing said properties of said software component from being inherited by another component.

Claim 1 is not tangibly embodied. Claim 1 recites the limitation that could be manipulated/pointed out in a piece of paper to an abstract idea that is not particular in a practical application. Such claim fails to be in the technological or useful arts and thus fails to recite patent eligible subject matters.

Claims 2-3 fail to remedy the deficiencies of independent claim 1.

As per Claim 4: Claim 4 recited the limitation in the same manner as in Claim 1; the claim is not tangibly embodied. The claimed limitation recites a method that could be manipulated/pointed out in a piece of paper to an abstract idea that is not particular in a practical application and thus fails to be in the technological or useful arts and thus fails to recite patent eligible subject matters.

As per Claim 5-7: Claims 5-7 are claiming a method for connecting a first software component to a second software component, which is led by Claim 4, where the claimed recitation of Claim 5 recited the method that is not tangibly embodied. The claimed limitation recites a method that could be manipulated/pointed out in a piece of paper using a pencil and a ruler toward an abstract idea. Such claim fails to be in the technological or useful arts and thus fails to recite patent eligible subject matters.

Claims 6-7 fail to remedy the deficiencies of independent claim 5.

- According to the analysis above, claims 1-7 are claiming the methods that are not tangible in computer hardware for causing the computer to execute in a practical manner. The claims 1-7 thus are manipulating an abstract idea and held nonstatutory.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of application amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 4-7, 12-15, 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Magee et al., "Composing Distributed Object in CORBA", 1997 IEEE.

Given the broadest reasonable interpretation of followed claims in light of the specification:

As per Claim 4: Magee discloses,

A method for programming a software component, said method comprising the steps of.- defining properties of said software component, including at least one input port and at least one output port (See page 258, Figure 2, Component Filter, Provide input, Provide output [properties of said software component]); and providing a software mechanism for instantiating said software component (See page 259, Figure 3, instance J).

As per Claim 5: Magee discloses,

A method for connecting a first software component to a second software component providing a service, said method comprising the steps of defining properties of said first and second software components, including at least one input port and at least one output port (See page 258, Figure 2, Component Filter, Provide input, Provide output [properties of said software component]); connecting an output port of said first software component to an input port said second software component (See Figure 3, P to F(2)); and ensuring said output port of said first software component matches said input port said second software component (See Figure 3, based on 'bind' instruction).

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As per claim 6: Magee discloses,

The method of claim 5, wherein said ensuring step ensures said protocols of said ports match (See Figure 3).

As per claim 7: Magee discloses,

The method of claim 5, wherein said ensuring step ensures said types of said ports match (Figure 2, see 'bind' instruction).

As per Claim 12: Magee discloses, "A system for programming a software component, said system comprising: a memory that stores computer-readable code; and a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to: define properties of said software component, including at least one input port and at least one output port; and provide a software mechanism for instantiating said software component" because this claimed limitation has the functionally corresponding to the limitation of claim 4. See rationale as discussed above for Claim 4.

As per Claim 13: Magee discloses, "A system for connecting a first software component to a second software component providing a service, said system comprising: a memory that stores computer-readable code; and a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to: define properties of said first and second software components, including at least one input port and at least one output port; connect an output port of said first software component to an input port said second software component; and ensure said output port of said first software component matches said input port said second software component.", because this claimed limitation has the functionally corresponding to the limitation of claim 5. See rationale as discussed above for Claim 5.

As per Claim 14: Magee discloses, "The system of claim 13, wherein said processor is further configured to ensure said protocols of said ports match", because this claimed limitation has the functionally corresponding to the limitation of claim 6. See rationale as discussed above for Claim 6.

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As per Claim 15: Magee discloses, "*The system of claim 93, wherein said processor is further configured to ensure said types of said ports match*", because this claimed limitation has the functionally corresponding to the limitation of claim 7. See rationale as discussed above for Claim 7.

As per Claims 18-19: Claims are rejected in the same reasons as set forth in connecting to the rejections of Claims 4 and 5, because the claimed functionality is corresponding to the functionality of Claims 4 and 5, respectively. See rationale as discussed above for Claims 4, and 5.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-3, 9-11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Magee et al., "Composing Distributed Object in CORBA", in view of Jamil et al., "A Declarative Semantics for Behavioral Inheritance and Conflict Resolution", 1995 SiteSeer.

Given the broadest reasonable interpretation of followed claims in light of the specification:

As per claim 1: Magee discloses, *A method for programming a software component, said method comprising the steps of: defining properties of said software component, including at least one input port and at least one output port* (See page 258, Figure 2, Component Filter, Provide input, Provide output [properties of said software component]).

Magee does not explicitly address:

preventing said properties of said software component from being inherited by another component.

However, Jamil discloses such limitation by teaching that the inheritance of object-oriented program can be prevented by using syntactic instruction for withdrawing properties definition (re: Jamil: page 131, third paragraph).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the declaratives (properties) in a component object of Magee as suggested by Jamil such as modifying syntactic instructions. Doing so it would conform to declaration and grammar rules of the programming language for having an object not being inherited from other components.

As per claim 2: From further limitation of Claim 1, Magee further discloses, *further comprising the step of allowing said software component to access an external environment only through said output port* (See page 260, Figure 4, graphically, it shows such accessibility).

As per Claim 3: From further limitation of Claim 1, Magee further discloses, *further comprising the step of allowing a client to access said software component only through said input port* (See Page 6, Figure 4, graphically, it shows such accessibility).

As per Claims 9, 17: Claims are rejected in the same reasons as set forth in connecting to the rejection of Claim 1 because the claimed functionality is corresponding to the functionality of Claim 1. See rationale as discussed above for Claim 1.

As per Claims 10, 11: Claims are rejected in the same reasons as set forth in connecting to the rejections of Claims 2, and 3, because the claimed functionality is corresponding to the functionality of Claims 2 and 3, respectively. See rationale as discussed above for Claims 2 and 3.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Bruno et al., "Architectural framework for developing concurrent applications", 1995 IEEE, discloses a framework to support concurrent applications.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (703) 308-9049. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM ET. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam, can be reached on (703) 305-4552.

The fax phone numbers:

(703) 872-9306 (for formal communication intended for entry);

(703) 746-5429 (for informal or draft communication, please label "PROPOSED" or "DRAFT").

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

TED T. VO

Patent Examiner
Art Unit: 2122
May 26, 2004